

D1 This application is a continuation-in-part application of United States Application Serial Number 08/232,545, filed April 22, 1994, which is incorporated herein by reference.

On page 14, starting on line 32, through page 15, line 17, delete the full paragraph and replace this paragraph with the following in accordance with 37 CFR §1.121. A marked up version showing changes is attached.

D2 Due to the inherent degeneracy of the genetic code, other DNA sequences which encode substantially the same or a functionally equivalent amino acid sequence, may be used in the practice of the invention for the cloning and expression of the MKK protein. Such DNA sequences include those which are capable of hybridizing to the human MKK sequence under stringent conditions. The phrase "stringent conditions" as used herein refers to those hybridizing conditions that (1) employ low ionic strength and high temperature for washing, for example, 0.015 M NaCl/0.0015 M sodium citrate/0.1% SDS at 50°C.; (2) employ during hybridization a denaturing agent such as formamide, for example, 50% (vol/vol) formamide with 0.1% bovine serum albumin/0.1% Ficoll/0.1% polyvinylpyrrolidone/50 mM sodium citrate at 42°C; or (3) employ 50% formamide, 5 x SSC (0.75 M NaCl, 0.075 M Sodium citrate), 5 x Denhardt's solution, sonicated salmon sperm DNA (50 g/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, with washes at 42°C in 0.2 x SSC and 0.1% SDS.

**In the Claims:**

Please cancel claims 31-37, and 40, without prejudice or disclaimer.

Please amend the claims as follows. A marked up version showing changes is attached.

D3 6 ~~48~~. (Amended) An isolated protein which is encoded by a naturally occurring nucleic acid molecule which hybridizes under highly stringent conditions to the nucleic acid sequence which encodes the polypeptide of SEQ ID NO:4, wherein said stringent conditions are selected from the group consisting of:

(a) 0.15 M NaCl/0.0015 M sodiumcitrate/0.1% SDS at 50°C for washing;

(b) 50% (vol/vol) formamide with 0.1% bovine serum albumin/0.1% Ficoll/0.1% polyvinylpyrrolidone/50mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl and 75 mM sodium citrate at 42°C during hybridization; or

(c) hybridization in 50% formamide, 5 x SSC, 5 x Denhardt's solution, 50 g/ml sonicated salmon sperm DNA, 0.1% SDS, and 10% dextran sulfate at 42°, with washes at 42° in 0.2 x SSC and 0.1% SDS.

<sup>3</sup>  
D<sub>4</sub> 1 ~~41~~. (Amended) An isolated protein comprising the amino acid sequence shown in SEQ ID NO:4.

D<sub>5</sub> 4 ~~44~~. (Twice Amended) A fusion protein comprising the isolated protein of Claim ~~41~~ or ~~42~~ fused to a heterologous amino acid sequence.  
1 2

D<sub>6</sub> 7 ~~49~~. (Amended) An isolated protein comprising the amino acid sequence shown in SEQ ID NO:6.

D<sub>7</sub> 10 ~~52~~. (Twice Amended) A fusion protein comprising the isolated protein of Claim ~~49~~ or ~~50~~ fused to a heterologous amino acid sequence.  
7 8

11 ~~55~~. (Amended) An isolated protein which is encoded by a naturally occurring nucleic acid molecule which hybridizes under highly stringent conditions to the nucleic acid sequence which encodes the polypeptide of SEQ ID NO:6, wherein said stringent conditions are selected from the group consisting of:

(a) 0.15 M NaCl/0.0015 M sodiumcitrate/0.1% SDS at 50°C for washing;

<sup>8</sup>  
D<sub>8</sub> (b) 50% (vol/vol) formamide with 0.1% bovine serum albumin/0.1% Ficoll/0.1% polyvinylpyrrolidone/50mM sodium phosphate buffer at pH 6.5 with 750 mM NaCl and 75 mM sodium citrate at 42°C during hybridization; or

(c) hybridization in 50% formamide, 5 x SSC, 5 x Denhardt's solution, 50 g/ml sonicated salmon sperm DNA, 0.1% SDS, and 10% dextran sulfate at 42°, with washes at 42° in 0.2 x SSC and 0.1% SDS.